

dmp

UNITED STATES DEPARTMENT OF ENERGY

1200  
Page 15

Meeting of the National Petroleum Council

\* \* \*

Madison Hotel  
Dolly Madison Room  
15th & M Streets, NW  
Washington, D.C.

Thursday,  
November 10, 1983

The meeting of the Advisory Council was called to  
order at 9:35 a.m.

ADVISORY COUNCIL MEMBERS PRESENT:

ROBERT A. MOSBACHER, Chairman

HON. DONALD PAUL HODEL, Secretary of Energy

RALPH E. BAILEY, Vice Chairman

MARSHAL W. NICHOLS, Executive Director

HON. JAN W. MARES, Assistant Secretary of Energy

THEODORE A. BURTIS, Chairman, Petroleum Inventories  
and Storage Capacity

I N D E X

	Page
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

Call to Order by Robert A. Mosbacher, Chairman  
National Petroleum Council

3

Remarks by the Honorable Donald Paul Hodel,  
Secretary of Energy

4

Reports of Study Committees of the National  
Petroleum Council:

a. Interim Report of the Committee on  
Petroleum Inventories and Storage  
Capacity, Theodore A. Burtis,  
Chairman

21

b. Progress Report of the Committee on  
Enhanced Oil Recovery, Ralph E. Bailey,  
Chairman

45

Consideration of Administrative Matters:

a. Report of the Agenda Committee,  
A.V. Jones, Jr., Chairman

52

b. Report of the Finance Committee,  
John G. Phillips, Chairman

54

Memorial Resolution to Melvin H. Gertz

56

Discussion of Any Other Business Properly  
Brought Before the National Petroleum Council

58

Adjournment

59

P R O C E E D I N G S

9:35 a.m.

THE CHAIRMAN: Would the 86th meeting of the National Petroleum Council please come to order.

You have before you this morning a copy of the agenda, and we have an excellent turn-out we're delighted to see. And, if there's no objection, we'll dispense with the calling of the roll.

I would suggest that -- I hope everyone has checked in at Executive Room A which is out that door and first door on your right as you're going down the hall. If you have not, please do so immediately following the meeting. And that's the way we'll check the attendance.

I would like to introduce the head table at this time. To my far left, Mr. Ted Burtis; next to him is Secretary -- the Secretary Mares, Jan Mares. On my far right is our leader and hard worker for the National Petroleum Council, Marshal Nichols and on his immediate left is Vice Chairman Ralph Bailey. As you see, on my immediate right is the Secretary of Energy. And we're very fortunate to have the Secretary with us this morning. I think we're even more fortunate to have as Secretary of Energy who has a great background and knowledge in the energy industry and the few areas that when he became Secretary he was not -- only in his mind -- totally up to speed. He has quickly not only gotten up to speed

dmp

1 but is certainly far ahead of most of us.

2 We are honored and delighted to have with us the  
3 Secretary of Energy, Don Hodel who will make a few remarks.  
4 We'll introduce new members and we'll answer questions from  
5 Council members.

6 Secretary Hodel.

7 (Applause.)

8 SECRETARY HODEL: Thank you, Bob.

9 I'm much more hesitant being here today than I was  
10 a year ago, because a year ago you were all in a forgiving  
11 mood because I had just newly been appointed. Now, I've been  
12 here a year and I'm probably expected to know something and  
13 in view of some of the things that have been happening to us,  
14 I sometimes wonder whether we know anything.

15 I have been predicting that natural gas would pass.  
16 We're getting closer and closer to the end of the session and  
17 I still continue to predict that a natural gas bill will pass.  
18 Some of us -- some of you had a chance to discuss that with me  
19 in some detail last night, and I -- I welcomed those opportu-  
20 nities because I get insight everytime, additional, into the  
21 whole process.

22 Let me stop at the beginning here and point out a  
23 number of people. Is Danny back there?

24 Oh, here. Our new Deputy Secretary, sworn in on  
25 November 3rd, is Danny Boggs. Stand up, Danny, so everybody

dmp

1 can see you.

2 (Applause.)

3 SECRETARY HODEL: I think, I think many of you know  
4 Danny and have probably worked with him on a number of issues  
5 during the time he was at the White House or in some of his  
6 prior incarnations, here. I am tremendously delighted to have  
7 Danny on board. He is an extremely capable and analytical  
8 individual who has already made major contributions to our  
9 efforts. He will have a major role to play in our efforts  
10 here in the closing days of this session to do something about  
11 natural gas. And he will also be assuming major areas of  
12 responsibilities within the Department, particularly with  
13 regard to Defense programs. And I look for him, of course,  
14 beyond that to be involved in all of the major policy activities  
15 of the Department. I'm just delighted to have him on board  
16 and those of you who know him know precisely why.

17 I also have had, have had join me here today my  
18 Executive Assistant who is sitting in the balcony. Don Perlman,  
19 if you'd stand and be identified. And the reason I point Don  
20 out is that if some of you sometimes have trouble reaching me  
21 or Danny, at least I can assure you that if you reach Don you  
22 have reached one of us, also. And I appreciate having him  
23 with me here today.

24 The first thing I'd like to do is introduce the six  
25 new members. Now, the last time I checked two of these people

dmp

1 hadn't necessarily shown up this morning, yet; but I will go  
2 through in alphabetical order in spite of that. Now, has  
3 John Buckley arrived?

4 (No response.)

5 SECRETARY HODEL: Okay, John, I'm sure will be here.  
6 He is the immediate past president of Northeast Petroleum.  
7 He's from Chelsea, Massachusetts. He's long been known as a  
8 far-sighted and articulate spokesman for the marketing segment  
9 of the industry and for his leadership in industry associations.

10 Raymond Hefner is here. Ray where are you? There  
11 you are. Stand up so people can see you. They already know  
12 you, but stand up so they can see you, again.

13 He's chairman and CEO of Bon Rae Energy Corporation.  
14 He's a spokesman for the marketing segment of the industry  
15 and he's known for his leadership in industry associations, as  
16 well.

17 George Mitchell is here. I saw -- there you are,  
18 George. Chairman and President of Mitchell Energy and Develop-  
19 ment Corporation, one of the nation's largest independent oil  
20 and gas producers. He's an industry leader returning to the  
21 National Petroleum Council and he's a past president and  
22 chairman of TIPRO.

23 Sam Knoble is here. Sam? He's Chairman of the  
24 Board of Knoble affiliates of Ardmore, Oklahoma, producer;  
25 industry association activities, religious association activities,

dmp

1 civic, educational, cultural endeavors have gained him honors  
2 and he's been made a member of the Oklahoma Hall of Fame.

3 Chelsea Pruett, owner of Pruett Drilling Company,  
4 Chelsea? From Eldorado, Arkansas. He's an independent oil  
5 and gas producer for the last 35 years. He's also a leader  
6 in professional and civic organizations. He's been active in  
7 politics and he is on the board of the Cowboy Hall of Fame.

8 Henry Saril, President of Sooner Pipe and Supply  
9 Corporation. Henry is here. He's chairman and chief executive  
10 officer of Big Heart Pipeline Corporation in Tulsa. He's a  
11 leader in civic, charitable and cultural groups. He has many,  
12 many honors, including recognition from the National Conference  
13 of Christians and Jews Brotherhood Award.

14 We are delighted to have all of these people join  
15 this august body in which there is probably the greatest single  
16 accumulation of knowledge about the oil and gas industry in  
17 the world of any organization I can imagine; and it is a great  
18 pleasure to have you all here.

19 (Applause.)

20 SECRETARY HODEL: I should also acknowledge the  
21 departure of the former National Petroleum Council Chairman,  
22 John Swearingen who has served on the Council for 23 years.  
23 He's been on 25 study committees and, including chairing the  
24 Third World Development Study which was done by the NPC. I'm  
25 sure John will be missed, although I expect he will be around

dmp

1 in the industry. In fact, recently, he and I were both on the  
2 same programs twice in a row. And the first time, I spoke  
3 first and the second time he was scheduled to speak first.  
4 And we thought that was only fair; but it turned out that  
5 because of my schedule I spoke first the second time, too.  
6 So, poor John had to sit through my stuff twice. And I, of  
7 course, had to leave when I finished speaking. You know how  
8 that works. It really wasn't fair and I owe him two, now,  
9 instead of being even on board with him.

10 I also wanted to recognize that Bud Gertz from  
11 Dallas, Texas, was killed in a plane crash. We have a resolu-  
12 tion, memorial resolution which will be coming before the  
13 group later. He was a member for nine years of the Council.  
14 His presence here will be missed and I'm sure we all extend  
15 our sympathy and concerns to his family and his friends.

16 Now, the National Petroleum Council, as you well  
17 know, is an outstanding example of industry/Government  
18 cooperation. I think that your reports have been comprehensive.  
19 They have been incisive; but, certainly, they have been  
20 useful. The concrete information which you have presented on  
21 massive and complex issues relating to the petroleum ministry  
22 has been extremely useful to us. I look forward to receiving  
23 the Interim Petroleum Inventories and Storage Capacity report  
24 and I guess it's next spring when we receive the final report.

25 We also look forward to receiving next spring the



dmp

1 Enhanced Oil Recovery report, on which, I believe there will  
2 be a progress report, today.

3 I've asked that you take a look at two additional  
4 tasks. The first one is key to our initiatives at the  
5 Strategic Petroleum Reserve. We, we expect the Strategic  
6 Petroleum Reserve to be nearly half-way to the 750,000,000  
7 barrel goal very soon. We're pushing 370,000,000 barrels at  
8 the present time.

9 Distribution capability from that Reserve is  
10 extremely important. It is one of the areas where we continue  
11 to get questions from, from both supporters and critics of  
12 the Strategic Petroleum Reserve. And, so, we are hopeful that  
13 the National Petroleum Council could provide us with a review  
14 of that situation. Many, many of the features of the Strate-  
15 gic Petroleum Reserve, I'm told, stem from earlier NPC studies  
16 back in 1973, 1974, having to do with the distribution system.  
17 Obviously, changes have occurred in that period of time. And  
18 what we'd like is a new study addressing the 1984 to 1990  
19 time frame, the types of crude that are needed, industry  
20 transport capability, refiner capacity and so on and any  
21 changes that are required or should be built into our planning  
22 for the Strategic Petroleum Reserve.

23 And Bob Mosbacher and I were talking. It may be  
24 that this and the second study we request can be actually  
25 combined into one. I would certainly defer to the knowledge

dmp

1 of this group in deciding how this all ought to be structured.  
2 But we, also, are concerned about the changes that may have  
3 occurred or may be occurring in the world-wide tanker industry  
4 since the 1973-74 embargo. And while this may be -- this may  
5 be extremely accessible information to you and presumably,  
6 therefore, to us, I think what we're looking for is an analysis  
7 that relates the current tanker capacity and operation and  
8 structure to what we're doing with regard to the Strategic  
9 Petroleum Reserve and the Petroleum Emergency Planning activ-  
10 ities.

11 Incidentally, it will probably come as no surprise  
12 or shock to anybody, I have asked the GAO to extend the charter  
13 for the National Petroleum Council so that it can continue in  
14 existence. And that is -- I'm not bringing up at this point  
15 to say "You either do those studies or I won't," because I've  
16 gone ahead and done it.

17 (Laughter.)

18 SECRETARY HODEL: And I anticipate, of course, that  
19 that will be provided in due course.

20 Let me talk a little bit, briefly, about the Strate-  
21 gic Petroleum Reserve. We made the decision in the last  
22 quarter of the last fiscal year that we would attempt to  
23 increase the fill rate at the Strategic Petroleum Reserve in  
24 the first quarter of this fiscal year. Beginning October 1st,  
25 we began a fill rate between 220 and 230,000 barrels a day for

dmp

1 the first quarter.

2 Now, our required rate, as I recall, is 186,000  
3 barrels a day under the Senate and House language, so, we are  
4 filling at a greater rate than that in the first quarter of  
5 this year. And our purpose was simply to put more oil in  
6 dispose sooner under that fill rate than would have been  
7 required if we had levelized the fill rate.

8 This would indicate that by the end of the year we  
9 would have had to adjust downward because of the limitation  
10 on funds and we will undoubtedly reduce that rate in some  
11 subsequent quarter.

12 As to oil prices, you probably have better forecasts  
13 on that than I do. I think you are probably aware or need to  
14 be aware that our official forecasts, the OMB and the Department  
15 of Energy official forecasts are that all things being equal  
16 that the price of oil will gradually increase over the next  
17 several years so that by 1990 in real terms it's somewhere  
18 between the current price and \$40 a barrel. As some people  
19 put it, very close to the official price that existed a couple  
20 of years ago.

21 The only problem with that kind of a forecast is  
22 that all things being equal covers a multitude of sins and if  
23 you had to bet, today, that all things would remain equal you'd  
24 want pretty long odds. And I think that the forecast on prices  
25 is an extremely important -- extremely important evaluation

dmp

1 that we make.

2 What troubles me about it is that no matter how  
3 many qualifiers we put into that forecast, we say we don't  
4 know what will happen in the Gulf; we don't know what will  
5 happen to other energy supplies, and so on, the fact remains  
6 that when the forecast is published all people tend to look  
7 at are the numbers. And I'm concerned that we not find our-  
8 selves in a situation where we, where we blithly assume we've  
9 got a reliably priced supply of oil that is readily available  
10 over the long-term future and make national policy changes  
11 on that assumption. It seems to me we ought not to be -- we  
12 ought not to be evaluating current alternative energy projects  
13 based on this kind of a forecast. And, as you know, I  
14 struggle with that consistently because I say one of the  
15 toughest jobs I have is to try to maintain momentum on  
16 renewables and conservation at a time when there appears to  
17 be a surplus of energy. We've got a surplus of natural gas  
18 at the present time. We have a surplus of oil which is going  
19 to be stable priced as far as the forecasts all indicate  
20 without taking into account the qualifications.

21 We have surplus electric generating capacity in  
22 the country and so on. And when you put all that together  
23 if you assume that that is a sound basis on which to plan for  
24 the future of this country, I'm terribly concerned that we are  
25 -- we are kidding ourselves.

dmp

1 We've been putting a great deal of emphasis, recently,  
2 on emergency preparedness. We look at what kind of capability  
3 we had to respond and answer the questions that the American  
4 people would naturally ask in the event of an interruption of  
5 the supply of oil out of the Gulf. That's a significant  
6 portion of the free-world's oil supply. As you know better  
7 than I do, that's not replaceable by increased surge capacity  
8 from other quarters. As a result, we felt we had to have an  
9 analysis which would indicate to us just how significant it  
10 was. And, of course, a total interruption of the supply out  
11 of the Gulf would not be tolerable and the President, not too  
12 many nights ago, on the Press Conference indicated in response  
13 to a question that we would not tolerate it.

14 And in that regard he did not change any policy or  
15 make any new policy. He is carrying forward a policy which  
16 was enunciated in prior administrations and it should not be  
17 a surprise to us, but I think it underlines, again, the  
18 importance of our being prepared.

19 As a result of our involvement at the Secretary of  
20 Office level in that process with Assistant Secretary Bill  
21 Vaughn is responsible for emergency preparedness there has  
22 been some restructuring of that office. The Deputy Assistant  
23 Secretary, Bart House, who is known to many of you is very  
24 much involved in this process. The policy direction is coming  
25 from the Assistant Secretary and from me. We are attempting

dmp

1 to get ourselves organized and if people on your staff who  
2 are responsible for these kinds of areas received communica-  
3 tions from us, I hope that you will encourage them to take  
4 them seriously because we are taking them seriously. The  
5 whole administration is.

6 Let's talk briefly about natural gas, clarify our  
7 position if at all possible. I've said consistently since the  
8 adoption by the Senate Committee by a resounding 11 to 9 vote  
9 without recommendation of Senate 1715 that we favored the  
10 adoption of Senate 1715 without amendment.

11 Let me emphasize that that is our preferred position,  
12 but we also recognize that if in order to obtain a majority of  
13 the votes which is obviously necessary to pass something,  
14 adjustments have to be made in the Senate. But I can't imagine  
15 that the Administration would resist a good bill just because  
16 it isn't precisely what is in Senate 1715.

17 I don't know how to make it any plainer than that.  
18 What I am trying to say is we are not participating or encourag-  
19 ing amendments to 1715. We do recognize that the legislative  
20 process is a process of compromise. And we expect that those  
21 who want to put together a majority for the basic thrust of  
22 Senate 1715 will, will take into account -- will attempt to  
23 accommodate changes that are proposed by people who can't live  
24 with what's in 1715.

25 We recognize that if that process is successful and

dmp

1 50 votes can be put together for it, that it would be unwise  
2 for us to indicate that we would not be willing to entertain  
3 something that was good for the country, that moved in the  
4 right direction, that tried to accomplish the objectives that  
5 the President sought in proposing a natural gas decontrol bill  
6 simply because it wasn't precisely the words that were in 1715  
7 I hope -- I hope that's clear.

8 I would still expect that what we will see is a  
9 significant flurry of activity in the closing minutes, hope-  
10 fully, hours of this session of Congress before they go home.  
11 I still believe that there is tremendous apprehension on the  
12 Hill about the prospects of going home at Christmastime not  
13 having dealt with the issue of natural gas. Even though the  
14 price at the well head in this country has fallen on average  
15 a couple of cents over the last six to eight months, the price  
16 at the burner tip has gone up. It's gone up on the average  
17 seven to ten percent. This ought to tell you something about  
18 where some of the price pressure is coming from. It seems to  
19 have no impact on the people presently dealing with the issue  
20 in the legislative arena.

21 But because of those facts this means that the  
22 consumer is going to see higher prices this winter for its  
23 natural gas; and if we have a normally cold winter he will  
24 see not only 10% higher prices per unit, but he will be  
25 consuming about 10% more gas than he consumed last year and I

dmp

1 haven't done the calculations, but it suggests to me he will  
2 see prices in excess of 20% per month higher than he paid  
3 last year, if that all came to pass.

4 And I submit to you that if the prices last year  
5 during a warm winter caused the kind of consternation in the  
6 Congress that it did, then a higher price this year will cause  
7 even greater consternation.

8 So, I think that for those of you who are concerned  
9 about natural gas, as I think many of you are, as I am, now is  
10 an excellent time to try to get your act together and to work  
11 with the Congress and come up with something you can whole-  
12 heartedly support which has a chance of passage.

13 It isn't enough to have something you can whole-  
14 heartedly support, it's got to have a chance of passage to do  
15 you the good you want it to do. And if you don't do that, I  
16 think there's a great risk that we all face in January, a  
17 sudden panicky reaction on the part of a Congress now beleaguered  
18 by constituents who are paying high prices and demanding some  
19 kind of quick fix.

20 So, I urge you to give that your earnest attention.  
21 You're in town; this is a super opportunity to think great  
22 thoughts and communicate them to each other as may seem  
23 appropriate. I would never advocate anybody lobby.

24 (Laughter.)

25 One last thing is there will be testimony by the



dmp

1 Department on -- and others -- on the subject of, I think it's  
2 a generic hearing, on the subject of natural gas and Alaska.  
3 We are cognizant of the, of the commitments made in prior  
4 Administrations which we have carried forward which are, in  
5 our view, is that we would seek to remove Federal Government  
6 and other governmental obstacles to the construction of the  
7 Alaskan natural gas transmission system. And there is now some  
8 suggestion that there are other approaches for the getting of  
9 gas out of Alaska that ought to be considered. And we will be  
10 suggesting that -- depending on the assumptions made or the  
11 facts with regard to how much gas is available and the like  
12 that we do not visualize this Administration trying to stand  
13 in the way of enterprises which have a legitimate opportunity  
14 to succeed.

15 But in the end we do not believe it is a Federal  
16 responsibility to try to fund or support the building of  
17 energy facilities at the operational level. And we do not  
18 think that our commitment to Canada goes as far as the Federal  
19 Government becoming involved in some kind of program to build  
20 a transmission system.

21 I think the question is and I think rightfully the  
22 sponsors of the project have asked that they be given the  
23 opportunity to -- the sponsors of the ANX Project be given the  
24 opportunity to seek investors who are willing to support the  
25 project on its commercial merits. And that we strongly favor.

dmp

1 And I hope that our testimony today will be plain on that  
2 subject.

3 With that, I would be happy to try to respond to  
4 questions and the floor is open.

5 VOICE: Mr. Secretary?

6 SECRETARY HODEL: Yes?

7 VOICE: We are positive thinking people. We are  
8 going to get a gas bill, but January comes and we don't have  
9 a bill. What are the plans -- how can we counteract the dry  
10 hole?

11 SECRETARY HODEL: I don't have a good answer for  
12 the question. It's a good question and it's something you  
13 should be thinking about. We're thinking about it, but I don't  
14 have a good answer.

15 A lot will depend on what happens in the wanning days  
16 of this session. If we make a good run at it and strike out,  
17 we're in one posture. If we simply can't get to the floor with  
18 a proposal, we may be in another posture. I would expect that  
19 -- I would expect that the effort would have to be made in  
20 January to have a viable responsive decontrol bill as an  
21 alternative to the quick fix proposal that will be coming  
22 forward. How much strength we can put behind it at that time  
23 remains to be seen. But I can't imagine that you can ever  
24 afford to be in the situation of leaving Congress with a  
25 recontrol proposal or nothing as its alternatives. I think

1 that makes their choice quite simple and not one that you  
2 should favor.

3 Yes?

4 VOICE: Mr. Secretary, in your flexibility on  
5 Senate 1715 which response I understand, would that flexibility  
6 go so far as to would you still support 1715 if it were modi-  
7 fied to the point that it was passed by maintaining controls  
8 on some categories of gas in order to facilitate decontrol of  
9 other kinds of gas?

10 SECRETARY HODEL: Fred, I'm going to -- did every-  
11 body hear the question?

12 The question is in our being flexible on 1715 does  
13 the flexibility go so far as to, as to permit us to consider  
14 supporting 1715 even if it is changed in such a way as to  
15 leave controls on significant categories of gas.

16 As I indicated, we are trying to avoid putting our-  
17 selves in the posture of initiating or welcoming compromise  
18 proposals. Any response I give to you in substance, Fred, is  
19 going to invite discussion of possible merits. My inclination,  
20 therefore, is not to answer your question and to respond by  
21 saying Danny Boggs gave me a great phrase the other day: "Our  
22 position on 1715 is that we are flexible, but not supine."

23 (Laughter.)

24 SECRETARY HODEL: All right. I appreciate the  
25 opportunity to be here. I intend to stay through the, the

dmp

1 reports that are to be presented. I welcomed the opportunity  
2 last night to meet many of you, again, and talk with you. And  
3 I hope that I will have that opportunity many times in the  
4 future. Whether we -- whether we're meeting at receptions or  
5 otherwise, what I'd like to emphasize is I, I do believe that  
6 energy is tremendously important to this country.

7           You are familiar with the national energy policy  
8 plan which we have put out. It is a working document within  
9 the Department. I think we've laid out some principles and  
10 some strategies there that are sound and viable. And we wel-  
11 come the advice and counsel of people who are in the energy  
12 industry. We think that the people who know something about  
13 the industry can sometimes provide very important contributions  
14 and in spite of the conflict of interest laws which suggest  
15 that people who know something about something are not allowed  
16 to discuss it, we welcome the opportunity to get advice and  
17 counsel. And I hope that you'll find that our door is open  
18 and that we are responsive.

19           Again, it is a great pleasure to be here and good  
20 luck to you, today, in your deliberations.

21           (Applause.)

22           THE CHAIRMAN: Thank you, Mr. Secretary, and thank  
23 you for taking time from your very busy and hectic schedule  
24 not only to come here as Co-Chairman of the National Petroleum  
25 Council and as Secretary of Energy, but also to stay as long as

dmp

1 you can with these reports which are so important. We  
2 appreciate it.

3 There's another guest here who is partner to the  
4 Secretary in a much larger sense than National Petroleum  
5 Council or even the Department of Energy. And we're delighted  
6 to see Ms. Hodel, here. Barbara, would you stand up?

7 (Applause.)

8 THE CHAIRMAN: We're also delighted to know that  
9 you recommend the extension of the Charter to this organization  
10 because many of us thought we might lose our jobs and have to  
11 change our way of living.

12 (Laughter.)

13 THE CHAIRMAN: And, so, we're grateful for that.

14 And now, speaking of the reports and the important  
15 work that goes on here, we have the report, an interim report  
16 on inventory and storage by Mr. Ted Burtis who is its chairman  
17 and has worked very hard, speaking not only for his committee  
18 but particularly for himself in preparing this. Ted.

19 MR. BURTIS: Thank you, Bob.

20 Mr. Secretary, ladies and gentlemen, a year ago the  
21 Secretary requested the National Petroleum Council to update  
22 the inventory and storage volumn of the 1979 petroleum storage  
23 and transportation capacities study.

24 NPC has conducted nine such studies for the Federal  
25 Government since 1948 aimed principally at emergency planning

dmp

1 purposes. This committee was appointed by the Chairman in  
2 March of 1983 and had its first meeting on March 18th. And  
3 at the meeting, the Committee agreed on the scope, the organiza-  
4 tion and the general time schedule for the study which I will  
5 briefly review before turning to a condensed discussion of  
6 the draft interim report that is before you this morning.

7 To assist the Committee with this assignment, the  
8 Chairman of the NPC appointed a Coordinating Subcommittee and  
9 a Task Group. The Task Group, composed of representatives of  
10 major oil companies, independent refiners, marketers, gasoline  
11 and distillate jobbers, manufacturing companies, academia, and  
12 research organizations, is examining the secondary system and  
13 the tertiary segment. The Coordinating Committee which is  
14 composed of representatives of major oil companies, independent  
15 refiners, transportation companies and, also, academia, has  
16 prepared the primary system analysis and has oversight respon-  
17 sibility for the Task Group's assignment. DOE designated J.  
18 Erich Evered, Administrator of the Energy Information Adminis-  
19 tration, Jimmy Petersen, Director of the Office of Oil and  
20 Gas of EIA, and James M. Diehl, Director of Data Quality Section  
21 of EIA's Petroleum Supply Division, to be the Government Co-  
22 chairmen of the Committee, the Coordinating Subcommittee, and  
23 the Task Group, respectively.

24 The Committee agreed that the primary petroleum dis-  
25 tribution system would be the principal focus of the study. This

dmp

1 Committee also agreed that an extensive examination of the  
2 secondary distribution system and the tertiary storage segment  
3 should also be undertaken because of the size and the potential  
4 impact on the primary system.

5 Now, this part, that is the secondary and primary  
6 part of the study, will examine secondary inventory and storage  
7 capacities as of March 31, 1983. And that date was selected  
8 in order to be consistent with the primary system analysis.

9 The analysis of the secondary system will be con-  
10 ducted in two steps: the inventory and storage at retail fuel  
11 marketing outlets will be estimated from industry data, while  
12 the amount in bulk plants will be determined by a survey that  
13 has already been sent to approximately 2,000 holders of motor  
14 gasoline, diesel or distillate fuel oil, kerosine, and residual.  
15 The survey is very short -- only three questions on inventory  
16 and storage capacity and five questions on the petroleum futures  
17 markets.

18 Several state and regional petroleum marketing associa-  
19 tions have expressed their support for the survey and have  
20 described it in their trade publications. The NOJC has also  
21 agreed to distribute for publication by their state affiliates  
22 a statement describing this important study.

23 A high level of response is important to the success  
24 of this survey. Companies -- and if you're among them --  
25 selected to receive the survey are urged to participate, as it

dmp

1 is certainly in the best interests of EIA and the industry to  
2 have a better understanding of this important link between  
3 producers and consumers in the whole petroleum supply system.

4 For the tertiary segment, the Task Group will analyze  
5 published data and industry estimates of the various consuming  
6 sectors.

7 Because the study and the analysis of the primary  
8 system could be completed much earlier than the balance of the  
9 study, it was agreed that an interim report should be issued.  
10 The final report will integrate the secondary distribution  
11 system and the tertiary segment analyses with the primary system  
12 and will also include a discussion on the relationships among  
13 the distribution systems and the tertiary storage segment.

14 The schedule agreed to by the Committee called for  
15 consideration of the primary system analysis by this Committee  
16 today, and that's what is in front of you, and for completion  
17 of the entire assignment in the spring of '84, and the Sub-  
18 committee will meet that schedule.

19 Another slide.

20 I got a little ahead of myself, but -- now. We've  
21 had -- the Subcommittee had six meetings and the Task Force  
22 three times and the work is going on.

23 As to the objectives, the Committee agreed at the  
24 early meeting that these principal objectives for the primary  
25 system were these: Estimate the minimum operating inventory



dmp

1 levels for crude oil and principal refined products; analyze  
2 the volumes of inventory that the system held on September 30,  
3 1982 and March 31, 1983; and to determine the amount of  
4 storage capacity that's in the system.

5 Now, to develop the data on the primary system, the  
6 NPC surveyed the companies that report primary inventory data  
7 to the Energy Information Administration on a monthly basis.  
8 Price Waterhouse received and tabulated the survey results  
9 under contract to the NPC. And that contract specified that no  
10 individual company inventory data would be released to any  
11 representative of the Department of Energy, the National  
12 Petroleum Council or any other organization. And that confi=  
13 dentiality has been kept.

14 The DOE mailing list contains 505 companies. Now,  
15 44 of these do not hold inventories of the products covered  
16 by the NPC Survey. Of the remaining 461 companies, 250 or  
17 54%, responded to one or more of the questionnaires. Of the  
18 250 responses, 23 were not usable. This 54 response rate is  
19 consistent with the 55% response which we experienced in the  
20 1979 Survey.

21 Could I have the next slide, please, and we'll talk  
22 about some results.

23 The real significance is not so much in the number  
24 of responses from companies, but is in the coverage computed  
25 on a volumetric basis. And the response coverage by category

dmp

1 ranged from a high of 92% -- I think perhaps you can see that  
2 -- for crude oil to a low of about 54% for residual fuel oil.  
3 Now these 1983 Survey responses are a little less than those  
4 that were received from the 1979 Survey.

5         The Subcommittee evaluated the levels of response  
6 to determine whether they were adequate for use in drawing  
7 conclusions about -- from the Survey results. And they did  
8 conclude that the coverage is high enough to permit analysis of  
9 the results as representative of the way that inventory and  
10 tank capacities are managed in the distribution system, primary  
11 distribution system. Therefore, the key inventory and tankage  
12 data were adjusted upward to the DOE universe by dividing by  
13 the percentage of volumetric coverage.

14         For example, the sum of the responses for individual  
15 company minimum operating inventory for motor gasoline as of  
16 March 31, '83, was 154 million barrels. And so to adjust to  
17 the DOE universe that 154 was divided by 84.8 percent which  
18 was the volume coverage and then -- which yields the overall  
19 figure of 181.8 million barrels.

20         For crude oil, however, certain modifications for  
21 crude oil lease stocks and Alaskan crude oil in transit by  
22 water were made prior to the adjustment in order to ensure a  
23 consistency with the data as they are reported to EIA

24         The petroleum inventories and the storage capacities  
25 by the Survey included neither the Strategic Petroleum Reserve

dmp

1 nor crude oil and products located in U.S. possessions and  
2 territories or in transshipment facilities in the Caribbean.  
3 These volumes, however, are discussed in the appendices to  
4 the report, which you have.

5 Now, the report itself -- if I might have the next  
6 slide -- is organized this way. First, an introduction and  
7 Executive Summary of the report's findings and conclusions;  
8 an overview of the petroleum distribution systems and the role  
9 of inventory and storage capacity; an analysis of the changes  
10 that have occurred in the primary system since the '79 report;  
11 and, then, finally, as you see, a list of appendices that have  
12 background information, methodology-related information data.

13 Well, let's talk some about the findings and the  
14 conclusions beginning with the minimum operating inventory.  
15 If I might have the next slide, please. The major objective  
16 of the study is to re-examine the minimum operating inventory  
17 levels estimated by the Council in the '79 report. And the  
18 minimum operating inventory level is defined as the inventory  
19 level below which operating problems and shortages would begin  
20 to appear in a defined distribution system.

21 As you can see from the slide, the 1983 minimum  
22 operating inventory estimates are lower than in 1979, primarily  
23 because refineries and pipelines and tankage have been taken  
24 out of the distribution system in response to the lower demand  
25 since that time.

dmp

1 As in the two previous NPC estimates of the minimum  
2 operating levels, the '83 estimates were developed by a  
3 decision-making process in which individual judgments were  
4 discussed in the context of operating experience, obviously,  
5 and, of course, the relative statistical -- the relevant  
6 statistical data.

7 In addition to historical inventory data, the Sub-  
8 committee considered the sum of the individual company minimum  
9 inventory -- minimum operating inventories as reported in the  
10 '83 survey and the industry-wide estimates of minimum levels  
11 which were reported on the survey.

12 Now, historical inventory data let us test the  
13 reasonableness of the previous operating levels by determining  
14 whether any spot shortages or distribution problems occurred  
15 when the stocks were either above or below the 1979 minimum  
16 operating levels. These problems, then, can be explained in  
17 the context of the minimum operating inventory levels --  
18 changes, since the last study.

19 Now, I've got a few slides to try to illustrate that.  
20 Let's have the next one which deals with crude oil. Can you  
21 see that? They're a little obscure. But this slide shows the  
22 level of crude oil inventories since 1978 and the previous  
23 minimum operating inventory estimate, which you see is 290  
24 million barrels.

25 Because the crude oil inventories have been above the

dmp

1 minimum operating level at all times since the last Survey  
2 and no significant physical shortages have developed, no  
3 physical test of the reasonableness of that estimate has  
4 occurred. Both the sum of the individual company responses and  
5 the average of the industry-wide estimates suggest that the  
6 modest proposed reduction in the crude oil minimum level  
7 estimate from 290 million barrels to -- over on the red, as  
8 you see -- 285 million barrel is reasonable and is justified.

9 Now, the 1983 minimum operating inventory estimate  
10 includes slightly over 30 million barrels of Alaskan crude oil  
11 in transit and the majority of which was not included in the  
12 1979 estimate. The addition of 42 million barrels of crude oil  
13 storage capacity which has occurred would also increase the  
14 minimum operating inventory estimate. These increases, however,  
15 are believed to have been more than offset by the effect of  
16 refinery closures, the reduced quantities of imported crude  
17 which is being processed and reduced refinery runs.

18 Let's turn to motor gasoline, the next slide. This  
19 shows the inventories over the 1978 to '83 period. Now, while  
20 motor gasoline inventories on a national basis have not dipped  
21 below the '79 estimate of the minimum, they came very close in  
22 the spring of 1982 and again in the spring of 1983. And at  
23 those times some companies announced temporary localized  
24 allocations of motor gasoline at the primary distribution level.  
25 It does appear that this was more a result of inventories being

dmp

1 rapidly drawn from the primary into the secondary and tertiary  
2 levels because of expectations of increasing prices -- and I  
3 guess this year increased tax -- than it is a result of actual  
4 physical shortages. No significant regional shortages  
5 developed in the primary system.

6 And as a result of this experience and the '83 Survey  
7 results, the Committee is proposing that the minimum operating  
8 inventory estimate for motor gasoline be reduced from 210  
9 million barrels as in the '70 to 200 million. A modest reduc-  
10 tion, but it seems to be justified by the facts.

11 Let's go to another one and look at kerosine and  
12 kerosine-type jet fuel at the next level. Nationally, these  
13 inventories have not fallen below the minimum levels established  
14 in the '79 study and no shortages were known to exist for these  
15 products during that entire period.

16 Again, therefore, we have no critical test of the  
17 validity of the '79 minimum operating level. Based on this  
18 operating experience and the decreased sum of individual  
19 company minimum operating inventories, the NPC's previous  
20 estimate of the kerosine and the kerosine-type jet fuel minimum  
21 level is proposed to be decreased from 35 million barrels to  
22 30 and 5 million barrels of which is in fact the kerosine  
23 minimum.

24 Distillate fuel oil -- the next slide -- is a some-  
25 what different situation. A five-year history of distillate

dmp

1 fuel inventories which fell well below the minimum levels in  
2 the spring of 1982 and in the spring of 1983. And spot  
3 shortages occurred in the spring of '82 because April, for  
4 most of the country, was an unseasonably cold month. In '83,  
5 inventories were tight, actually falling slightly below even  
6 the proposed '83 minimum level, but widespread shortages did  
7 not occur because of the fact the heating season was over and  
8 demand was pretty low.

9 The sum of the individual company minimum operating  
10 inventories and the fact that the inventories had been below  
11 minimum operating without widespread shortages support the  
12 proposed reductions in the minimum operating estimates from  
13 125 million barrels as in the '79 Study to 105 million, which  
14 is the number you probably can't read in red on that slide.

15 Residual fuel oil in the next slide, the '78 to '83  
16 inventories of resid are shown on this slide and because the  
17 resid market is still undergoing significant changes an estimate  
18 of the minimum operating inventories for resid oil deserves  
19 less confidence than those of the other products.

20 Residual fuel inventories have been below the '79  
21 estimate of minimum for most of '82 and of '83. Shortages have  
22 not occurred; but the market has been very tight, with inven-  
23 tories at about 45 million barrels, as you can see from the  
24 chart.

25 Heavy reliance on residual fuel imports and the

dmp

1 significant reduction in residual oil demand because of  
2 decreased economic activity and fuel switching support a large  
3 reduction in minimum operating inventory for residual fuel from  
4 60 million barrels to 40 million barrels, which is being  
5 proposed here. Now, a word of caution, a stronger economy  
6 could increase the minimum operating level for residuals in  
7 the future, but we face the same crystal ball problem that the  
8 Secretary referred to on prices.

9 I'd like to move now and talk about another important  
10 aspect and that is the question of a day's supply of inventory.  
11 One of the principal uses of a minimum operating inventory  
12 estimate is in emergency preparedness planning. Minimum operat-  
13 ing inventory levels do not decline proportionately with  
14 demand nor are they available for use without causing some  
15 shortages. So that a day's supply calculation of inventory --  
16 of product based on total inventory do not represent a true  
17 indication of the availability of products. That is, almost  
18 in essence, a going out of business kind of scenerio.

19 For example, on March 31, 1983, the data for gasoline  
20 indicated 33 days of supply when calculated on the basis of  
21 total inventory. A better way to assess the adequacy of the  
22 inventory levels is to look at how much inventory above the  
23 minimum required to run the system is available. And by this  
24 method, March 31, '83, data for gasoline would indicate 3.5  
25 days' supply.



dmp

1 Now, let's look at some of the others. Here's crude  
2 oil, as well as gasoline. We calculated it both ways, on the  
3 total inventory and on the available above the minimum operat-  
4 ing. And, of course, it shows what appears to be a rather  
5 startling difference from 32 days in one case for crude to  
6 6.5 days of gasoline, 32.7 and 3.5 distillate fuel and 40 to  
7 4.7.

8 It is, though, the second one, the day's supply  
9 above minimum shows a lot smaller number, but it is a better  
10 measure of the available supply and should be more useful in  
11 emergency planning.

12 Now, a word of caution, an apparent low number of  
13 days' supply above minimum should not be a matter of concern  
14 in times of normal operation. The inherent flexibility of  
15 the petroleum supply and distribution system backed by an  
16 ample supply of crude, by available refining capacity and  
17 transportation facilities ensure the ability of the system to  
18 meet product demand.

19 I think that these two calculations, in a sense,  
20 are extremes; so, the one on total days is a going out of  
21 business where everything gets drained on, which is unrealistic.  
22 The other says this is the availability at which no disruption  
23 of any kind would occur. And, obviously, there are gray areas  
24 inbetween. But this really, the second one, we think more  
25 accurately represents the way the system actually works.

dmp

1 Well, I leave that for the moment and then I'd like  
2 to go on and talk next about the question of total levels of  
3 inventory, and we have another slide. It's out of focus --  
4 there, we go.

5 The next slide does show that the levels of inventory  
6 held in the system has dropped since the '79 Study. You have  
7 copies of these charts, incidentally, in the materials before  
8 you if you can't read these very well. The reduction occurred  
9 in PADDs i - IV, while PADD V, I think you can see from there,  
10 showed an increase. The major reason overall for the reduction  
11 is lower market demand. Some other factors that have led to  
12 decreased inventory levels are the, first of all, the perceived  
13 security of supply of crude oil and petroleum products and,  
14 of course, the high cost of carrying inventory.

15 Storage capacity is also an important part of the  
16 study, and if I might have the next slide, tankage -- well,  
17 comment first. Tankage in operation and under construction  
18 together with tankage idle but available within 90 days provide  
19 an estimate of the total tankage available to the system. And  
20 what we have here is the shell capacity of the tankage.

21 There is a net increase of 42 million barrels in  
22 storage capacity in operation for crude oil between '78 and '83.  
23 Product storage capacity declined some 67 million barrels  
24 during this period causing the total storage capacity in  
25 operation in the system to be less in '83 than it was in '79.

dmp

1 You can see a million 492 in this year's study against a  
2 million 504 in the earlier study.

3 The decline in capacity is due to reductions in  
4 product demand, to some refinery shut-downs, to removal from  
5 service of tankage which was not retrofitted to meet some  
6 environmental regulations, and, of course, a certain amount  
7 of physical deterioration of the tankers.

8 Now, idle tankage can be restored to service, but  
9 much of it is scattered in small volumes all across this  
10 country; and, therefore, the report concludes that reliance on  
11 any substantial part of this tankage for emergency preparedness  
12 is really not very practical.

13 Utilization of tank capacity -- let me have the  
14 next slide. And this is the last one. This compares the  
15 percentage utilization of tank capacity -- and now we go back  
16 over the 35-year -- the history of the NPC series of reports.  
17 Inventory in tankage has averaged about 46% of storage  
18 capacity over the whole period. And this average persists  
19 because I guess we kind of know this by instinct individual  
20 tanks fluctuate between full and empty, and at anytime the  
21 industry-wide utilization hovers somewhere around 50%. The  
22 8% decrease in tank utilization in '83 as against '78 may  
23 reflect the impact of a number of factors.

24 These include, again, the decline -- demand decline  
25 in the period, increased spare refining capacity and once

dmp

1 again, the higher cost of holding inventories. It is also  
2 expected that some storage capacity reported in the 1983 Survey  
3 will be deactivated and which will then tend to return the  
4 percentage utilization figure closer to the 46% historical  
5 average.

6 Well, that's the last slide. If I may have the  
7 lights. Just a few more comments.

8 In the course of the study, there were some topics  
9 examined which had not been examined in the previous report.  
10 And they are identified as factors in this analysis: refinery  
11 utilization, the availability of naphtha-type jet fuel, and  
12 the impact of the Strategic Petroleum Reserve on private  
13 inventory levels, and the question of what, what was the  
14 significance of the petroleum futures market.

15 The study sought to quantify the changes in stock  
16 levels attributable to spare refining capacity, which in effect  
17 allows refiners more flexibility to change product slates  
18 seasonally. The Survey results were not adequate to quantify  
19 the impact of spare refining capacity on inventory levels; but  
20 you'll see that the report states that the Committee believes  
21 that spare refining capacity is, in fact, a factor in the  
22 observed decrease in product inventory levels. And spare  
23 refining capacity in a sense is a surrogate for inventory.

24 Because of the strategic nature of naphtha-type jet  
25 fuel, stocks normally in storage and stocks of components that

dmp

1 could be immediately made available as naphtha-type fuel were  
2 surveyed. The Survey results show that on March 31, 1983, the  
3 normal stocks of naphtha-type jet fuel could have been increased  
4 by more than half by blending jet fuel components in storage  
5 into finished jet fuel. Now, this increased the question of  
6 production of jet fuel and would cause a corresponding reduc-  
7 tion in some of the other products where those components  
8 would ordinarily go given a fixed amount of crude.

9           The Survey also asked if the existence of the SPR  
10 contributed to a decrease in private stock levels. And with  
11 only one exception, the response was that the SPR did not  
12 impact the company's decisions on inventory management.

13           And, finally, a concern had been expressed that in the  
14 event of a supply shortage, some companies may rely on the  
15 futures market for supply, only to find in case of a disruption  
16 that the wet barrels might really not be there. The NPC Survey  
17 results suggest that, at this time, petroleum futures do not  
18 effect the level of inventories held at the primary level.

19           Probably current impact of the petroleum futures  
20 market on secondary inventory levels will be discussed in  
21 considerably more detail in the second -- in the Subcommittee's  
22 final report.

23           Well, a good deal more details about these findings  
24 and conclusions is in the draft report before you. I must say  
25 the draft was reported -- was prepared with an extremely

dmp

1 dedicated effort on the part of the Coordinating Subcommittee  
2 and a good many hours of analysis and discussion have been  
3 distilled into this succinct presentation of the current  
4 industry operations and the changes that have occurred since  
5 '78.

6 The Coordinating Subcommittee deserves our thanks  
7 for the thoughtful analysis and for meeting a difficult  
8 schedule. The Energy Information Administration representa-  
9 tives worked long and hard along with them and made a major  
10 contribution to this effort.

11 Mr. Chairman, that completes the report of the  
12 Committee on petroleum inventories and storage capacity, and  
13 I would like to move that the draft report be approved by  
14 the National Petroleum Council subject to final editing.

15 THE CHAIRMAN: Thank you, Ted, for an excellent job.

16 We have a motion. Do we have a second?

17 MR. BAILEY: Second.

18 THE CHAIRMAN: We have a second.

19 Is there any discussion?

20 VOICE: Mr. Chairman?

21 THE CHAIRMAN: Yes, Graham.

22 VOICE: Ted, you referred to in the study, the  
23 references made to secondary and tertiary -- it's been my  
24 observation all through last decade that the secondary and  
25 tertiary inventories, whatever they are, are just as important

dmp  
1 as primary in product. And I'm really wondering whether the  
2 DOE is really addressing this problem. To me, it is just as  
3 important a factor in emergency in '78 and '79, '73 and '74  
4 as having all this good information about what happened to  
5 the primary.

6 MR. BURTIS: Well, of course, that's what -- the  
7 rest, you know, we're not finishing this report till May; and  
8 what's going on from here on is for the first time, an  
9 examination of the secondary and the tertiary. I'm sorry if  
10 I didn't make that clear.

11 This is only -- the interim report is only the  
12 primary part of it and we are addressing the secondary and  
13 the tertiary.

14 VOICE: What I mean is somebody has to find the  
15 mechanism of getting the data.

16 MR. BURTIS: Well, that's why I was trying to be  
17 subtle and polite because you may all get questionnaires and  
18 there isn't -- it's been difficult to get it and I'm just  
19 urging everybody to respond to these so that we get a reasonable  
20 basis for making these kinds of estimates.

21 VOICE: On the lack of the responses, what do you  
22 do? Do you estimate? Do you fill in your total figures --

23 MR. BURTIS: On the primary system that I was referring  
24 to? Well, the methodology is that -- as I tried to say, it's  
25 not so much that you got 250 out of the 500 who were addressed

1 to respond, the more important thing is and you do have a  
2 pretty good sense of how much of the volume actually there is  
3 covered by the responses. And that's really where the adjust-  
4 ment is made.

5 I cited the example that the actual numbers for  
6 gasoline on a particular date were 154 million, but that  
7 covered about 85 percent of the potential volume. So, it  
8 was adjusted to the DOE universe simply by dividing the 154 by  
9 the 180. This, incidentally, is consistent methodology, the  
10 methodology that has been used in all these studies.

11 VOICE: If the primary storage is in terminals,  
12 that's the definition for primary, what are your definition  
13 points for secondary and tertiary, so we understand this.

14 MR. BURTIS: Well, I'm going to turn to Warren  
15 Burcher and the Coordinating Subcommittee because I think  
16 it's -- well, wait a minute, here.

17 VOICE: The primary goes on up through the  
18 terminals that receive oil by pipeline, barge or tanker.  
19 The secondary will pick up -- and, also, 50,000 barrels or  
20 larger.

21 The secondary will be those that do not receive  
22 oil by pipeline, tankers, barges and are less than 50,000  
23 barrels.

24 Basically, what we are talking about is the jobber  
25 where you pick up the secondary.



1 VOICE: There is a chart on page 13 of the  
2 report that segments each of these.

3 VOICE: What is the tertiary end?

4 VOICE: The tertiary is the consumer end.

5 VOICE: What he's got in his tank, in his home?

6 VOICE: His home, residual fuel inventories, the  
7 airlines, the trucks, the oil in the automobile tank, right  
8 at the consumer level.

9 MR. BURTIS: This is probably a case where we have  
10 more data than we can use rather than less.

11 THE CHAIRMAN: George?

12 VOICE: One other point, since your statistics  
13 were at a time when the economy was a little bit off,  
14 is there a correction on, say, a 3 percent growth pattern  
15 to recover some of the past growth, wouldn't that change  
16 your minimum requirement on primary, secondary and tertiary.

17 MR. BURTIS: I don't really know how you would  
18 do that. We picked spot dates and what we are trying to  
19 show here, as a way of getting at that is to see how  
20 those minimum shave been tested over the period of time,  
21 because you've got -- you know, you've got five years and  
22 there's been changes in the economy.

23 The caution, I think, we noted in the report,  
24 particularly with resid, is that it is in a very changing  
25 kind of situation and a very strong economy, if it came

1 back through resid rather than gas or coal, it might  
2 very well have it.

3 VOICE: Thank you.

4 THE CHAIRMAN: Any other questions or discussions?

5 VOICE: Bob, this is not a question on the report,  
6 but it is a question I'd like to ask the Secretary.

7 Is there any contemplation of ever having a  
8 dry run on letting the oil come out of the Strategic  
9 Reserve and actually be used by the oil companies, just to  
10 see how it works?

11 (Continued on following page.)

12

13

14

15

16

17

18

19

20

21

22

23

24

25

dmp

1 SECRETARY HODEL: Yes, I can answer that. Can you  
2 hear me? Can you hear me, now?

3 The question was have we ever considered a dry run  
4 and actually letting the oil come out of Strategic Petroleum  
5 Reserve and be utilized in the system, and, yes, we have  
6 considered such a dry run. And, frankly, some of the technical  
7 problems have really blocked us from doing it. We've run dry  
8 runs insofar as pumping it out of the Reserve and putting it  
9 into tanks on the surface just to prove we can get it out, move  
10 a million barrels in a day, and that sort of thing. But,  
11 structuring a test which would not subject us to incredible  
12 criticism is a little difficult because we have the, we have  
13 the problem that when you have a normal system and you're  
14 pulling out of the Strategic Reserve we would, we would be --  
15 say, if we'd pull a million barrels out and we sell it to some-  
16 body, we would be buying to replace at the very time that we're  
17 pulling out, and I can assure you that if there's any price  
18 differential between what we pull it out at and what we put --  
19 and what we put the new in, it'll be a national scandal.

20 So, it's a matter of some real concern to us as to  
21 how we would structure that. And one of the things we've  
22 talked about is the possibility of frankly just a straight  
23 trade which would require additional handling on the part of  
24 somebody with a refinery just in order to prove that you can  
25 take oil out of the Reserve and run it through a refinery and

dmp

1 that it will work.

2 As soon as we get into a straight trade talk some-  
3 body says, "Well, yes, but there would have to be some compen-  
4 sation for the additional cost imposed upon the refiner;" and  
5 I can assure you that you've got another making of a national  
6 scandal as soon as you start talking about us compensating  
7 somebody to refine our oil.

8 So, that has been an obstacle, but it is not by any  
9 means something we've precluded and there has been some dis-  
10 cussion with members of Congress about the possibility that  
11 maybe we ought to try to structure something that would be  
12 pre-conditioned in such a way that the arguments about the  
13 propriety of the process would be eliminated by the way it's  
14 structured in advance.

15 THE CHAIRMAN: Is there another question?

16 VOICE: I would simply offer a comment.

17 There are 4 or 5 of us operating LOOP (ph.) far  
18 under capacity. But it is in operation every day. Am I  
19 right in assuming that the people who run SPR have been  
20 over to LOOP and actually seen how it works. You know,  
21 they put it down in those salt caverns every day and take  
22 it out and, physically, it does work.

23 Is there some cross-fertilization going on?

24 (Laughter.)

25

dmp

1 SECRETARY HODEL: Well, I -- (a) I don't know, but  
2 I'm sure there has been. We had a hearing yesterday on the  
3 current status of the Strategic Petroleum Reserve. As you  
4 know, we have an arrangement there which has gone through an  
5 extensive assessment of the, of all the problems that can be  
6 identified. I simply don't have an answer to whether we've  
7 looked at that, but in light of what you've said, I'll pass it  
8 on.

9 THE CHAIRMAN: Well, when we get to the, before the  
10 agenda committee, at the Secretary's request, I think you'll  
11 find there very probably be studying the SPR further and there  
12 will be answers that we hope will be appropo at that time.

13 We've had the motion; we've had a second. Any  
14 further discussion?

15 (No response.)

16 THE CHAIRMAN: If not, may I have a vote?

17 Those in favor, please signify by saying "aye."

18 (Whereupon, a chorus of ayes were voiced.)

19 THE CHAIRMAN: Opposed?

20 (No response.)

21 THE CHAIRMAN: Okay. Thank you very much, again,  
22 Ted, to you and your committee and we'll look forward to the  
23 final report in the spring.

24 (Applause.)

25 THE CHAIRMAN: We now have another Herculeon task

dmp

1 going on and we are going to have an interim report -- not a  
2 report, actually, a progress report which will not require  
3 action, but a bringing up to date on the enhanced oil recovery  
4 and Mr. Ralph Bailey, who has been working very hard and has  
5 this committee, will give us his report. Ralph.

6 MR. BAILEY: Since this report is a progress update,  
7 it will be relatively brief. I reported here at the May  
8 meeting that it was the judgment of my committee that a com-  
9 plete re-study was in order rather than just an update of the  
10 study that was made on enhanced oil recovery back in '76. And  
11 this was primarily due to the technical, economic, environmen-  
12 tal and also legislative changes that we've seen since that  
13 time.

14 And, as you may recall from my last report, an  
15 organization was established with a coordinating subcommittee  
16 -- that's the smart guys -- and -- who would report to the  
17 committee on EOR.

18 Additionally, four task groups were established to  
19 assist the coordinating subcommittee in defining a consistent,  
20 reasonable estimate of the amount and, also, the timing of  
21 incremental oil that might be recovered under various  
22 assumptions and constraints. And a report that there has been  
23 considerable activity on the part of the study's working group  
24 certainly would be an understatement

25 The subcommittee has been meeting monthly since the

dmp

1 start of the study and currently have been meeting more than  
2 once per month and leave someone question their commitment, I  
3 note that the subcommittee recently held a Sunday meeting.

4 The task groups' pace has been even more intensive  
5 with most groups holding more than one multi-day meeting per  
6 month. And I believe that that schedule is a testimony to  
7 the strong support that the study is receiving from the  
8 numerous Council members, from this organization, and also  
9 from the DOE.

10 And I am pleased to report that this activity has  
11 resulted in substantial progress and the study's completion is  
12 in sight. The process task groups, assigned to study three  
13 major processes which are chemical, miscible, displacement,  
14 and thermal, have concentrated their efforts on improving a  
15 data base and developing computer models for us in the analysis  
16 and are just now completing the initial predictive runs.

17 The economic parameters and the sensitivities to be  
18 applied in the analysis have been defined by our Cost and  
19 Economics Task Group, as well as a methodology for compositing  
20 the predictive runs. With the coordinating subcommittee  
21 monitoring all phases of the study effort and providing guidance  
22 and resolution of the sensitive issues, as I'm sure you're not  
23 surprised. There are some. A number of major steps have been  
24 completed.

25 A significant step in the study has been the

dmp

1 compilation and the verification of a data base providing  
2 detailed reservoir information on approximately 2500 reservoirs.  
3 This activity involved extensive checking, in many cases,  
4 modification, and addition to the existing DOE data base by  
5 field operators and by industry personnel working on the study.

6 The net result is a far better data base, we think, than  
7 previously available. We did make a decision to analyze in  
8 detail reservoirs with at least 50 million barrels of oil in  
9 place or more and eliminated those below. Now, it didn't  
10 greatly reduce the number of reservoirs to be studied, but it  
11 has had only a minor impact on the amount of oil examined.  
12 Even at that cutoff level, the reservoirs being analyzed  
13 cover over 300 billion barrels, or about 67% of the estimated  
14 total oil originally in place in the United States.

15 Estimates of enhanced oil recovery will be based on  
16 two cases. The first is an implemented technology case which  
17 will include that oil obtainable with existing field-tested  
18 technology; and the second is the advanced technology case  
19 which will include that oil obtainable with improved technology  
20 that appears to be feasible over the approximate 30-year time  
21 frame of the study. Specific screening criteria have been  
22 developed by the three process task groups to separate the data  
23 base into subsets applicable to each process for both technology  
24 cases.

25 Each of the three process task groups has extensively



dmp

1 validated and calibrated and modified the models for use in  
2 predicting process and also economic performance. Some of  
3 these models are based on ones originally prepared for the DOE  
4 while others were developed specifically for this study. And  
5 their intended use is for screening and gross estimations only.  
6 And although they lack the sophistication and the precision of  
7 models used for individual project evaluation, these are by  
8 no means simple models and the task groups believe that they  
9 are adequate for estimating enhanced recovery potential under  
10 the specified technical and economic assumptions.

11 Initial predictive runs for the implemented technology  
12 case have been made for surfactant, alkaline, polymer, carbon  
13 dioxide miscible, and steam flood, as well as in situ combustion.  
14 The process task groups are currently reviewing these runs and  
15 making final adjustments to the models. The process task groups  
16 will then repeat this entire effort for the advanced technology  
17 case. The preliminary -- these preliminary results that we  
18 have seen indicate that the enhanced oil recovery among the  
19 various individual processes will likely vary considerably  
20 from those back in 1976.

21 Procedures have been defined for assigning reservoirs  
22 to the appropriate process, compositing the results of the  
23 predictive run and developing the rate-versus-time projections  
24 for oil recovery. Appropriate expenditure and other process-  
25 specific constraints will be imposed for each technology case

dmp

1 to create a real time simulation. In addition, sensitivity  
2 cases will be run for variations in price, minimum rates of  
3 return, tax rate, and other parameters. At present, data base  
4 reservoirs are assigned to each process and the compositing  
5 procedure is under way.

6 As I noted in May, the coordinating subcommittee is  
7 also addressing environmental concerns in greater depth than  
8 we did before. And to do this, selected members from each task  
9 group were assigned to work with Hal Scott of the Florida  
10 Audubon Society, who is a member of the subcommittee. And  
11 this group has visited typical installations for all major  
12 enhanced oil recovery processes and a separate appendix to  
13 specifically address environmental issues is currently being  
14 written for inclusion in the final report.

15 And this report will also deal more directly with the  
16 implications of research, with the addition of a separate  
17 appendix on that subject.

18 Each process task group has developed input for this  
19 section, providing descriptions of research developments since  
20 1976 and further research requirements associated with the  
21 advanced technology case. And' compilation of this appendix is  
22 also under way.

23 Significant progress has been made on writing these  
24 and other parts of the report and not dependent on calculations  
25 or results of the process models. Draft sections are being

dmp

1 reviewed and refined and will be combined in the near future  
2 with the analytical results into the final report.

3 As is often the case in studies of this nature,  
4 some phases of the study effort have required more time and  
5 more money to complete than we originally anticipated and  
6 particularly the work involved to update the data base and to  
7 modify and improve the various models. It is our judgment  
8 that if we didn't have that data base really as good as we  
9 can make it, then the report would not be as good. So, we  
10 have taken the additional time to do that and we feel that the  
11 benefits will be there for having taken the additional time.

12 In addition, the improved process models and their  
13 validation provides a means of obtaining reliable rate and  
14 recovery data.

15 I told you at the last Council meeting that the  
16 committee, subcommittee planned to complete its work by mid-  
17 December; however, the increased level of activity and the  
18 increased complexity that I mentioned has put us somewhat  
19 behind and we now expect to submit a draft report in late  
20 February.

21 And after committee review, then I expect a final  
22 report will be submitted to the Council for review at the  
23 spring meeting. The commitment and the expertise of the study  
24 participants has been outstanding and in my opinion that  
25 expertise will be reflected in a final report that will be far

dmp

1 better than anything we've had before.

2 And, Mr. Chairman, that completes my report.

3 THE CHAIRMAN: Thank you, Ralph. You and the  
4 committee's excellent work in this immense task, as I  
5 mentioned earlier, it is a progress report; and, therefore, it  
6 does not require any action, but I'm sure Ralph would be glad  
7 to answer any questions from committee members, from Council  
8 members.

9 (No response.)

10 THE CHAIRMAN: We thank you and appreciate your  
11 continuing effort in this important and worthwhile task.

12 Now, as you see, both the enhanced oil recovery  
13 project and the inventory and storage project will be coming  
14 up for final reports in the spring. With this in mind, we  
15 tried to pick a date at this time so if you mark your calendars  
16 at this juncture, at least, May 10th will be the probable date,  
17 the tentative date for the spring meeting. This will be  
18 confirmed to you by Marshal and his group right after the  
19 first of the year; is that correct?

20 Now, we come to administrative matters, and the  
21 first and very important one is regarding -- it was briefly  
22 mentioned the Secretary's request for additional studies. The  
23 Agenda Committee met on this yesterday and discussed this. And  
24 we'd like a report, please, from Mr. A.V. Jones. A.V.?

25 Thank you for coming, Mr. Secretary.

dmp

1 (Applause.)

2 MR. JONES: Thank you, Mr. Chairman.

3 Ladies and gentlemen, Mr. Hodel stated this morning  
4 he has requested the National Petroleum Council advice and  
5 recommendation on two subjects: the Strategic Petroleum  
6 Reserve and the world oil tanker outlook.

7 Copies of these request letters dated November the  
8 7th, 1983 are in your packets that you received this morning.  
9 And additional copies of these request letters will be available  
10 outside the room at the end of the meeting.

11 The letter on the Strategic Petroleum Reserve  
12 requests the Council to specifically address types of crude  
13 oil in the storage in the Strategic Petroleum Reserve, taking  
14 into account the latest and perspective U.S. refining  
15 capabilities and sources of supplies.

16 Industry capabilities to transport oil from the  
17 Strategic Petroleum Reserve storage sites to refineries and  
18 other aspects of the Government/industry relationship wherein  
19 the Council believes changes in the current plans for Strategic  
20 Petroleum Reserve distribution and composition should be  
21 warranted.

22 The letter on the world tanker outlook requests the  
23 Council to address the long-term availability and movement  
24 patterns of tankers world-wide. Trends and tanker size, flag  
25 and contractual provisions and other factors that may effect

dmp 1 tanker availability during emergencies in the 1984-1990 time  
2 period such as bunker fuel oil availability, environmental  
3 considerations and Federal laws and regulations.

4 Pursuant to the Section 71 of the Articles of  
5 Organization of the Council these requests were referred to  
6 the Agenda Committee for consideration as to whether the  
7 requests were proper and advisable for the Council to under-  
8 take. In consideration of these requests, the committee made  
9 the following observations.

10 The Council issued several reports during the 1973-  
11 1975 period that recommended some of the key features that  
12 were implemented in the Strategic Petroleum Reserve program.  
13 Questions have been raised relating to the physical capabilities  
14 of and the distribution procedures for the Strategic Petroleum  
15 Reserve stocks. Concerns have also been raised over avail-  
16 ability of tankers for emergency petroleum movements,  
17 particularly Jones Act tankers for the distribution of  
18 Strategic Petroleum Reserve stocks to appropriate facilities.

19 The Council voiced some general concerns in its  
20 1981 emergency petroleum report. If the Council accepts these  
21 requests a single committee should be established to respond  
22 to both letters due to the inter-relationship between the  
23 topics.

24 Mr. Chairman, the Agenda Committee finds these  
25 requests proper and advisable for the Council consideration and

dmp 1 recommends that the Council agree to undertake a study of the  
2 Strategic Petroleum Reserve and the world tanker outlook.

3 This is the report of the Agenda Committee and I  
4 move that it be adopted by the membership of the National  
5 Petroleum Council.

6 THE CHAIRMAN: Thank you for the motion.

7 VOICE: Second.

8 THE CHAIRMAN: We have a second. Is there any  
9 discussion of undertaking this study?

10 (No response.)

11 THE CHAIRMAN: There being none, those in favor of  
12 undertaking it, please signify by saying, "aye".

13 (Whereupon, a chorus of ayes were voiced.)

14 THE CHAIRMAN: And opposed?

15 (No response.)

16 THE CHAIRMAN: Thank you, A.V.

17 Those who are willing to be a part of this study, I  
18 would appreciate your coming forward after the meeting and so  
19 signifying to either Marshal Nichols or to me.

20 The next item on the agenda is the report of the  
21 Finance Committee. The Chairman of the Finance Committee,  
22 John Phillips was here to chair the committee yesterday. We  
23 had a meeting and, unfortunately, he had to depart; but a  
24 Mr. John Hall will give his report. John.

25 MR. HALL: Mr. Chairman, members of the Council,

dmp

1 the Finance Committee met yesterday to review the financial  
2 status of the Council. At our meeting, we reviewed expenditures  
3 and receipts for the first 10 months of the calendar year 1983  
4 and looked at projections for the remainder of the year.

5 At this time, I'm pleased to report to you that the  
6 financial condition of the Council is sound.

7 We also discussed our budget for the calendar year  
8 1984 and are recommending a calendar year 1984 budget in the  
9 amount of \$1,945,000 for your approval.

10 This budget includes \$1,670,000 of new funds to  
11 complete the two studies you have heard progress reports on  
12 this morning and to respond to the two new requests from the  
13 Secretary.

14 This budget also includes \$275,000 to complete the  
15 renovation and maintenance work at the Council offices that  
16 was approved in the calendar year 1983 budget, but due to many  
17 delays beyond our control it was not expended in 1983 and is  
18 now included in the 1984 budget.

19 The Committee also discussed recommended contributions  
20 for calendar year 1984-1985. Due to the uncertainty of the  
21 scope and the timetable of the new studies, we are recommending  
22 that we defer consideration of calendar year 1984-1985  
23 recommended contributions until our spring 1984 meeting at  
24 which time we will have a better feel of our need for cash  
25 requirements.



dmp

1 Thank you, Mr. Chairman, and I move that the report  
2 from the Finance Committee be adopted by the Council.

3 THE CHAIRMAN: Thank you, John.

4 Do I have a second?

5 Voice: Second.

6 THE CHAIRMAN: Thank you.

7 Are there any questions or comments regarding the  
8 Finance Committee report?

9 (No response.)

10 THE CHAIRMAN: Being none, those in favor of adopting  
11 please signify by saying "aye".

12 (Whereupon, a chorus of ayes were voiced.)

13 THE CHAIRMAN: Those opposed, "Nay".

14 (No response.)

15 THE CHAIRMAN: Thank you very much, John.

16 We now have a memorial tribute to Melvin H. Gertz,  
17 known to all of us as Bud Gertz; and Dr. Robert West -- if you  
18 would come forward, please, Bob, to make the report.

19 MR. WEST: Mr. Chairman, Council members. The  
20 members of the National Petroleum Council were deeply saddened  
21 by the sudden death of their distinguished colleague, Melvin  
22 H. Gertz, in a private airplane crash on October 20, 1983, near  
23 Morgan Cith, Louisiana.

24 Bud, as he was known to his many friends, began his  
25 career in the oil industry in 1944 on the staff of Humble Oil

dmp

1 and Refining Company in Bay Town, Texas. In 1947, he and  
2 Dr. Robert L. Pervin formed the Petroleum and Petroleum  
3 Chemical Engineering Consulting Business of Pervin & Gertz,  
4 Inc.

5 Bud became president of Pervin & Gertz in 1957 and  
6 was made chairman of the board in 1972. In 1968, Bud Gertz  
7 helped found Guam Oil & Refining Company and served as its  
8 chairman and chief executive officer until its sale in 1982.  
9 At that time, and with the formation of a subsequent company,  
10 Boundary Oil Company, in December 1982, which engages in oil  
11 exploration, drilling and production in Oklahoma, Texas and  
12 Louisiana, Bud assumed the job of Boundary Chairman and Chief  
13 Executive Officer.

14 An active alumnus of the University of Texas at  
15 Austin, Bud Gertz was honored as a distinguished engineering  
16 graduate in 1969 and served as chairman of the University's  
17 Engineering Foundation Advisory Council.

18 Bud Gertz was a patron of the arts in Dallas and  
19 was active in many civic organizations. Bud had served the  
20 National Petroleum Council as a dedicated member since 1974.  
21 He was an active participant on several study committees,  
22 including the current committee on petroleum inventories and  
23 storage capacity. Also, he was a member of the Council's  
24 nominating committee.

25 Therefore, with sincere admiration for his

dmp  
1 achievements and contributions to the industry and to this  
2 Council and with a sense of great loss, be it resolved on this  
3 10th day of November 1983, that the deepest sympathy of the  
4 members of the National Petroleum Council be extended to his  
5 widow, Elizabeth, and to the family of Melvin H. Gertz.

6 It is further resolved that this resolution be  
7 entered upon the permanent records of the Council and that an  
8 appropriate copy thereof be delivered to his family as a  
9 remembrance of the Council's esteem and deep appreciation.

10 Mr. Chairman, I move the adoption of this resolution.

11 VOICE: Second.

12 THE CHAIRMAN: Thank you, Bob.

13 I suggest we signify adoption of this resolution by  
14 standing for a moment of final reflection and prayer.

15 (Whereupon, a moment of silence was observed.)

16 THE CHAIRMAN: And as we come to the conclusion,  
17 before we have any motion for adjournment, is there any new  
18 business that any Council member would like to bring before the  
19 Council at this time?

20 (No response.)

21 THE CHAIRMAN: Any old business?

22 (No response.)

23 THE CHAIRMAN: Are there any non-Council members  
24 who would like to ask a question or speak?

25 (No response.)

dmp

1 THE CHAIRMAN: If not, before we have a motion for  
2 adjournment, I would like to request that Messrs. Bailey and  
3 Burtis stay here and see if there be any comments or  
4 questions to them on these reports from the press or others.

5 Can I have a motion for adjournment?

6 VOICE: I make the motion.

7 THE CHAIRMAN: Second?

8 VOICE: Second.

9 THE CHAIRMAN: All in favor?

10 (Whereupon, a chorus of ayes were voiced.)

11 (Whereupon, at 11:12 a.m., the meeting was adjourned.)

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1  
2  
3 REPORTER'S CERTIFICATE  
4

5 This is to certify that the attached proceedings  
6 before U.S. Department of Energy  
7 in the matter of:

8 National Petroleum Council  
9 Washington, D.C.  
10 November 10, 1983

11 were held as herein appears and that this is the original  
12 transcript thereof for the file of the Department  
13 or Commission.  
14  
15  
16

17 Edwin F. Brown  
18 Official Reporter

19  
20 DATE: November 15, 1983  
21  
22  
23  
24  
25